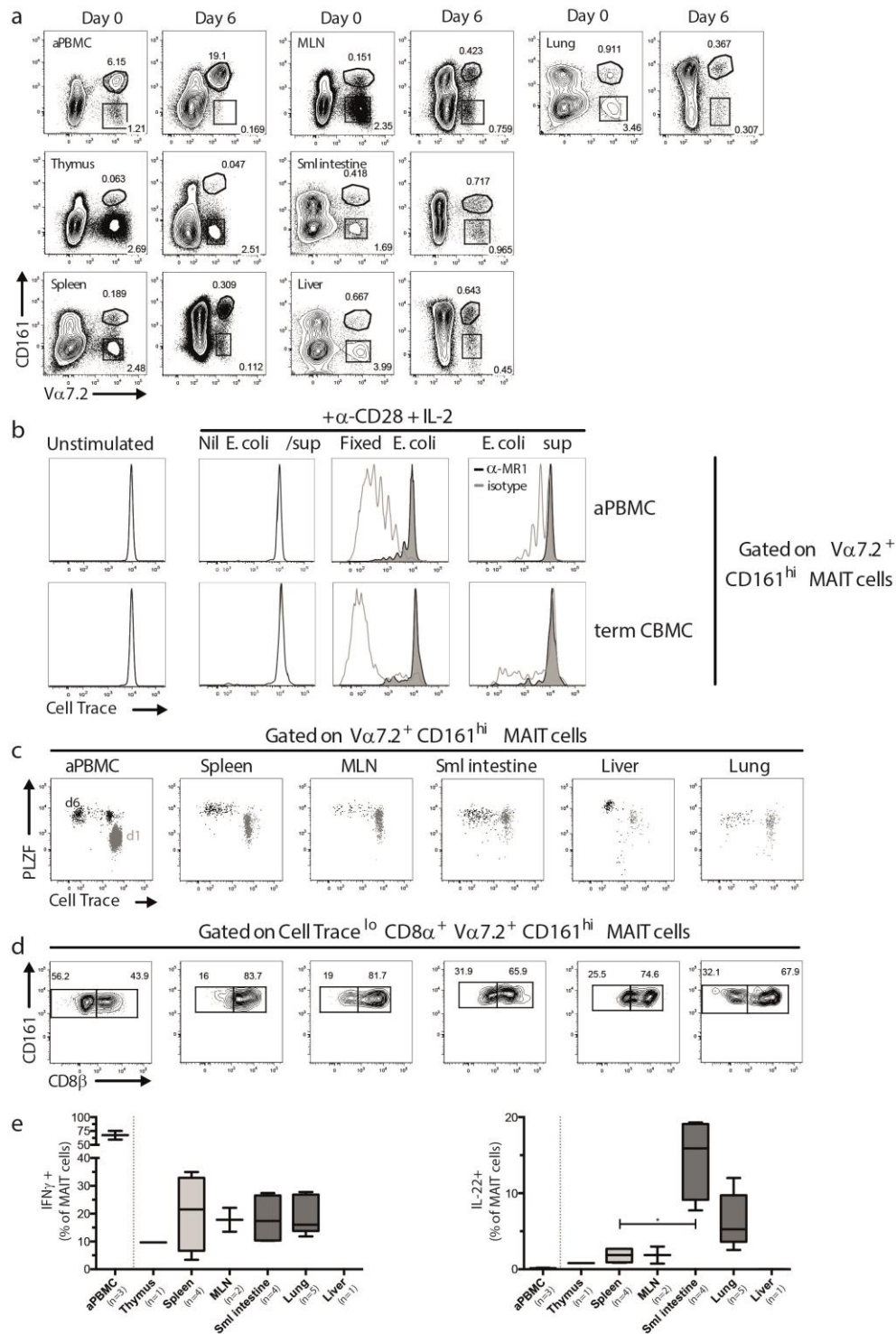


Supplementary Figure 1. (a) Gating strategy to identify MAIT cells in foetal tissues. A representative FACS plot of foetal lung tissues is shown. (b) Distribution of CD8⁺, CD4⁺ and DN fetal MAIT cell subsets in adult (a) PBMC (n=10) and foetal thymus (n=8), spleen (n=15), mesenteric lymph node (MLN) (n=8), small intestine (n=14), liver (n=9), and lung (n=12). Box and whisker plot shows median, IQR and the 10th to 90th percentile. * p<0.05, ** p<0.01, *** p<0.001 (Kruskal-Wallis ANOVA followed by Dunn's post-hoc test).



Supplementary Figure 2. (a) Comparison of foetal MAIT cell frequency after 6 days *in vitro* stimulation with *E. coli* and IL-2. (b) MAIT cell proliferation following *E. coli* stimulation of adult

PBMC or full-term foetal cord blood mononuclear cells (CBMC) is MR1-dependent. **(c)** Foetal MAIT cell proliferation following PHA/IL-2 stimulation. **(d)** The proportion of CD8 $\alpha\alpha$ and CD8 $\alpha\beta$ foetal MAIT cells that have proliferated following 6 days stimulation with *E. coli* and IL-2. **(e)** The proportion of IFN γ (left) and IL-22 (right) production in adult (a) PBMC (n=3) and foetal thymus (n=1), spleen (n=4), mesenteric lymph node (MLN) (n=2), small intestine (n=4), liver (n=1), and lung (n=5).following 6 hour PMA stimulation. Representative FACS plots are shown. Box and whisker plot shows median, IQR and the 10th to 90th percentile. * p<0.05 (Kruskal-Wallis ANOVA followed by Dunn's post-hoc test).